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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,851	12/16/2003	Svante Larsson	4448-4	3173
23117	7590	06/28/2005		
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			EXAMINER SMITH, RICHARD A	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/735,851

Applicant(s)

LARSSON, SVANTE

Examiner

R. Alexander Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 June 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 7-11 is/are allowed.  
6) ☒ Claim(s) 1-3, 5, 6 and 12-14 is/are rejected.  
7) ☒ Claim(s) 4 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 16, 2005 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 5, 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,961,220 to Som et al.

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Som et al. discloses a device having a snap locking angle adjustable device (figures 1-4) comprising a first pivot member (2) and a second pivot member (1), rotatable relative to each other around a pivot axis (through 21); a first contacting element (8) having a first alignment structure (23 and 24) that rotates rigidly with the first pivot member around the pivot axis; a second contacting element (9) having complementary first alignment structure (column 3, lines 62+) that rotates rigidly with the second pivot member around the pivot axis; a spring (12) that, in conjunction with a spring expansion restricting device (14 and 18), presses the first alignment structure axially against the complementary first alignment structure wherein the first alignment structure and the complementary first alignment structure align at certain angles between the pivot members, at which the spring force is reduced compared to at angles where they do not align, the spring expansion restricting device comprises two position limiting members (13-14 and 17-18), in between which the spring and the contacting elements are placed, rigidly held together by connecting structure, and each one of the contacting elements with its alignment structure is a single unit formed of plastic (column 3, lines 41-44), the first pivot member and the first contacting element are separate components joined to each other by structure (10 and 11) that rigidly connects these components with respect to rotations around the pivot axis, the second pivot member and the second contacting element are separate components joined to each other by structure (the second set of 10's and 11's) that rigidly connects these components with respect to rotations around the pivot axis.

Som et al. does not disclose said contacting elements with the respective alignment structure being formed by a moulding technique, the distance between position limiting members can be changed by an axial screw coupling of the connecting structure, allowing for adjustment

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of the spring force, and the combination of a sleeve on one contacting element and a sleeve groove on a facing contacting element, aligns and secures the contacting elements and the pivot members on the pivot axis.

With respect to the contacting elements with the respective alignment structure being formed by a moulding technique: This limitation is a "product by process" limitation and is directed to a step required to form the contacting elements and the respective said alignment structure. Therefore, this step does not provide enough patentable weight since it has been held that 1) the determination of patentability in "product by process" claims is based on the product itself, even though such claims are limited and defined by the process, and 2) the product in a "product by process" claim is unpatentable if it is the same as, or obvious from a product of the prior art, even if the prior art product was made by a different process. In re Thorpe et al., 227 USPQ 964 (Fed. Cir. 1985). Furthermore, as noted above Som et al. discloses these components are made from plastic.

With respect to claim 5, i.e., the distance between position limiting members can be changed by an axial screw coupling of the connecting structure, allowing for adjustment of the spring force: In column 3, lines 44-55, Som et al. discloses that the spring is pre-compressed between shoulder 16 and the washer 17 and that the washer 17 is fixed by means of nut 18: Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to change the screw coupling of the connecting structure (at the nut 18) to allow adjusting of the spring force in order to pre-compress the spring sufficiently so that the device can be rotated into use position and storage position by hand as disclosed by Som et al. but not loose enough that the device will rotate out of storage unintentionally.

With respect to claim 6, i.e., the combination of a sleeve on one contacting element and a sleeve groove on a facing contacting element, aligns and secures the contacting elements and the pivot members on the pivot axis: Som et al. discloses in figure 3 for the above embodiment that a bushing 19 is used around one of the positioning-limiting members (bolt 13) and further discloses in figure 5 a different embodiment wherein one of the contacting elements include a sleeve 41 and the other includes a sleeve hole 42 wherein a groove is formed by said hole and by element 2 in order to seal the device from the environment. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the sleeve and sleeve hole instead of a bushing, both as taught by Som et al., since Som et al. discloses that both can be used to seal the device from the environment and since the inclusion of the sleeve and hole would reduce the number of parts needed in assembly. With respect to the applicant's sleeve groove being on a facing contacting element versus Som's being formed by the facing contacting element in combination with plate 2: The sleeve groove, as claimed by Applicant, is considered to be equivalent to the sleeve groove, as disclosed by Som et al., since: 1) neither non obvious nor unexpected results, i.e., results which are different in kind and not in degree from the results of the prior art, will be obtained if one is used instead of the other, as long as the contacting elements are joined and properly sealed, as already taught Som et al.

The Applicant should note that the preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190

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USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

4. Claims 1-3 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 4,620,658 to Hile in view of U.S. 4,097,999 to Nowlin.

Hile discloses an adjustable square having a blade and a handle, said square having a snap locking angle adjustable device, comprising: a first pivot member (13) and a second pivot member (14), rotatable relative to each other around a pivot axis; a first contacting element (31) having a first alignment structure (35) that rotates rigidly with the first pivot member around the pivot axis; a second contacting element (25) having complementary first alignment structure (36-38) that rotates rigidly with the second pivot member around the pivot axis; a spring (32) that, in conjunction with a spring expansion restricting device (14 with 30 attached to 25; and 21, 31, 40 and 43), presses the first alignment structure axially against the complementary first alignment structure wherein the first alignment structure and the complementary first alignment structure align at certain angles between the pivot members, at which the spring force is reduced compared to at angles where they do not align, the spring expansion restricting device comprises two position limiting members (14 with 30 and 40) in between which the spring and the contacting elements are placed, rigidly held together by connecting structure, the first pivot member and the first contacting element are separate components joined to each other by structure that rigidly connects these components with respect to rotations around the pivot axis, the second pivot

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member and the second contacting element are separate components joined to each other by structure (column 2, lines 34-40 by means of the welding) that rigidly connects these components with respect to rotations around the pivot axis.

Hile does not disclose each one of the contacting elements with its alignment structure is a single unit formed by a moulding technique.

Nowlin disclose an adjustable angle device wherein the preferred material is a resin like Lexan in order to obtain the required accuracy, to make the gauge light and durable, and to allow molding of the components (column 4, lines 54-63). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the square, taught by Hile, by forming the components included the contacting elements with its alignment structure from a molding technique, as taught by Nowlin, in order to reduce manufacturing costs while obtaining the required accuracy and to provide a square that is light and durable.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hile and Nowlin as applied to claims 1-3 and 12-14 above, and further in view of U.S. 2,689,406 to Stromquist.

Hile and Nowlin together teach all that is claimed as discussed in the above rejections of claims 1-3 and 12-14 except for the distance between position limiting members can be changed by an axial screw coupling of the connecting structure, allowing for adjustment of the spring force.

Stormquist discloses an angle device wherein a screw and an axial screw coupling (35) can be used for adjusting the spring force (column 3, lines 1-40) in order to allow quick



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adjustment based on the friction drag preferred and on the amount of tension needed for the usage including that for other instruments and tools. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the connecting structure, taught by Hile, to include an axial screw coupling, as suggested by Stormquist, in order to allow the user to adjust the friction drag as preferred.

### *Response to Arguments*

6. Applicant's arguments filed June 16, 2005 with respect to Som et al. not teaching a square have been fully considered but they are not persuasive.

In response to applicant's argument with respect to Som et al. not teaching a square, and that the preamble stating "A carpenter's square" must be given patentable weight to its intended use and the examiner must produce a carpenter's square, the examiner cannot find any section in the MPEP that supports the applicant's argument. The procedure in the mechanical arts is that preambles, in general, are not given patentable weight unless they are drawn into the body of the claim(s) or breath life into the claim(s). Since neither appears to be the case, then the examiner does not find the argument persuasive. Therefore, in response to applicant's argument, the recitation "A carpenter's square" has not been given patentable weight because the recitation is the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or

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structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

In response to Som et al. and the argument at the top of page 9, i.e., the combination of the separate embodiments shown by Som et al.: and no motivation to combine and impermissible hindsight:

(a) In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. *In re Nomiya*, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. *In re McLaughlin*, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969).

(b) In response to Applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the

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Applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

(c) In this case, it appears to the examiner that the knowledge to combine the two is within the knowledge of one of ordinary skill in the art: In this case Som et al. discloses in the figure 1-4 embodiment a bolt, a sleeve, dust cover, and what appears to be gaskets on the sleeve that support and keep the first and second contacting elements centered. In figures 5-7, Som et al. discloses an embodiment wherein the sleeve is integral with one of the contacting elements and a groove is integral with the other and that the combination forms a coherent sub-assembly. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the sleeve and sleeve hole instead of a bushing, both as taught by Som et al., since Som et al. discloses that both can be used to seal the device from the environment and since the inclusion of the sleeve and hole would reduce the number of parts needed in assembly and provide a coherent sub-assembly.

In response to Hile in view of Nowlin and the applicant's argument that Hile teaches away from the molding technique described by Nowlin and no suggestion to combine.

(a) In response to Applicant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly

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articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. In re McLaughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. *In re Bozek*, 163 USPQ 545 (CCPA 1969).

(b) In this case, the examiner agrees that Hile does disclose machining and welding in order to manufacturing his square. However, Nowlin discloses a square that can be made via a molding process and discloses in column 4, lines 57-66 that if the tool were made of metal each tool would require machining to obtain the required accuracy and that the use of resin allows the accuracy to be built into the molding process rather than machined into each individual square. This appears to the examiner as providing the teaching to one of ordinary skill in the art to modify Hile in view of Nowlin for the motivations as disclosed in the applied rejection.

#### ***Allowable Subject Matter***

7. Claims 7-11 are allowable.
8. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims.
9. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. Alexander Smith whose telephone number is 571-272-2251. The examiner can normally be reached on Monday through Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F. Gutierrez can be reached on 571-272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'R. Alexander Smith', with a long horizontal flourish extending to the right.

R. Alexander Smith  
Primary Examiner  
Technology Center 2800

RAS  
June 27, 2005